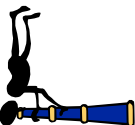


How To Locate Abandoned Wells



FACT SHEET

*Michigan Department of Environmental Quality
Office of Drinking Water & Municipal Assistance
Noncommunity & Private Drinking Water Supplies Unit
Environmental Health Section*



WHERE TO BEGIN

Abandoned wells that have not been plugged can be a safety hazard and an environmental threat. They serve as a direct conduit for contamination from the ground surface down into the drinking water. Landowners are obligated by state law to plug abandoned wells, but finding them can be a challenge in some cases. Your property may contain more than one abandoned well. Generally, there is one abandoned well per generation that the property has been occupied. Some abandoned wells are obvious because they stick above ground, above a basement floor, or a hand pump or a windmill remains attached to the well. Others terminate below ground, within structures known as well pits. A "well-trained-eye" can pick out signs of these structures. Many older abandoned wells were buried below the frost line (greater than 4 feet). Finding them requires metal detectors or other sophisticated electronic instruments followed by excavation. Some abandoned wells are under buildings or roadways and may never be found. When searching for abandoned wells, a landowner must take on the role of an investigator.

DID YOU KNOW ...

There are over one million abandoned wells in Michigan!



PHYSICAL EVIDENCE

- ☐ Windmills or handpumps.
- ☐ Casing (steel or plastic) visible above ground, concrete slab, or basement floor.
- ☐ Small outbuildings (may be well house).
- ☐ Pit in yard or basement.
- ☐ Basement offset (small room off of basement).
- ☐ Crock, brick, or stone structures.
- ☐ Manhole cover.
- ☐ Water system components (pressure tank, pump, control box).
- ☐ Waterline or patched hole through basement floor or wall.
- ☐ Circular ring in cement or patch in the floor.
- ☐ Patch in step or concrete (access for well below).
- ☐ Damp circular depression in yard.
- ☐ Additions, false walls, access panels which may "hide" well.
- ☐ Old building sites recognizable by an old foundation.
- ☐ Ornamental shrubs, flowers, or trees outlining old, home or farm sites.



TALK TO INDIVIDUALS

However, if there are no obvious clues to lead you to an abandoned well, talking to others may help. Here are some suggestions:

- ☐ Previous owner(s).
- ☐ Relatives or acquaintances who may know about the property.
- ☐ Neighbors (neighboring wells may give a clue as to well location, depth, etc.).
- ☐ Contractors (well drillers, plumbers, builders) who have worked on the property or in the area.
- ☐ Inspectors (well, plumbing, building, septic system).
- ☐ Current or former employees or maintenance personnel.

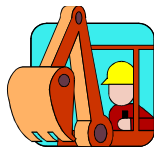
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RECORDS SEARCH



Before beginning the physical search of the property, you may find the following sources useful:

- ❑ Water Well and Pump Record or Abandoned Well Plugging Record at the local health departments.
- ❑ Water well or sewage disposal permits at local health department.
- ❑ City, township, or county officials – zoning or building permits.
- ❑ Municipal water department - records on water line extensions to homes previously served by water wells.
- ❑ Old photographs of the property.
- ❑ Aerial photographs of the property (showing windmills, well houses).
- ❑ Owner's records (bills, receipts, deed easements) or information written on pressure tank, pump control box, etc.



EQUIPMENT AND TOOLS

- ❑ Metal detector.
- ❑ Tape measure or “snake” to follow pipes out through walls.
- ❑ Digging equipment including shovels, hammers, chisels, backhoe.
- ❑ Magnetometer or electro-magnetic anomaly detectors (these are available through ground water consultants).

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the Quality of Life Human Resources, PO Box 30473, Lansing, MI 48909.

YOU FOUND IT, NOW WHAT?



To ensure proper plugging of the abandoned well, the following steps need to be taken:

1. Pumps, drop pipes, pump rods, packers, wire, check valves, and all other debris or obstructions must be removed from the well before plugging. Registered well drilling contractors have the knowledge and proper equipment to perform this important task.
2. The well diameter, depth, and site geology need to be determined. Different well types and different geologic formations have different well plugging requirements. Check the state code for further details.
3. Hire a registered water well drilling contractor to plug the well. While state law allows landowners to plug abandoned wells, the Michigan Department of Environmental Quality (MDEQ) advises against it and recommends that only registered well drilling contractors plug wells.
4. Complete an Abandoned Well Plugging Record and submit it to the local health department and to the DEQ. The well owner should attach a copy of the record to the deed for future reference.

FOR ASSISTANCE

Contact your local health department or the Department of Environmental Quality, Abandoned Well Management Program.

Noncommunity & Private Drinking Water Supplies Unit

Environmental Health Section

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